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TAKEOVERS AT THE INTERSECTION OF ECONOMIC COMPETITION AND FOREIGN POLICY IN AMERICA: EVIDENCE FROM 2000-2015

DANIEL DA SILVA

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Introduction

Economics suggests that any money exiting an economy through the current account (a trade deficit) has to in turn come back through the capital account (foreign direct investment). In the current political climate in America instead of viewing the entirety of the balance of payments many pundits have instead decided to focus in on the trade deficit as the biggest threat to the American economy. This was reflected over the course of last year's presidential campaign where in the first debate China was mentioned 11 times and Mexico was mentioned 6 times (Solis, 2016). This is hardly anything new in American politics with many presidential candidates vowing to scrap NAFTA and stop negotiating other free trade agreements for the past several election cycles (Amadeo, 2017).

However, with their finger on the pulse of the American electorate, one has to wonder if views on trade affect the ease of doing business for foreign companies trying to make acquisitions in America. Or do foreign companies just run in to the same issues that other American companies face when trying to acquire existing businesses in America? Would greater scrutiny on trade with countries that America runs trade deficits with lead to longer transaction closing times for companies from those countries? If trade is indeed a factor it will only be one of many issues and other factors pertaining to foreign policy or details of the deal itself will also play a factor.

This paper hopes to examine the relationship between the amount of time it takes for a transaction to close and many of the previously alluded to variables including the deal size, industry related factors, trade, and some foreign policy considerations. Does it take longer for foreign companies to close acquisitions than their American counterparts and do factors pertaining to their country of origin play any part in this?

Literature Review

A lot has been said of a company's financial performance after an acquisition has been completed and the various factors that can be detrimental or beneficial to a transaction post-merger. For example, in analysis of bank mergers it was found that dissimilarities in marketing and operational strategies were often detrimental to the successful financial outcome of a transaction (Ramaswamy, 1997). However, studying the potential variables that could impact the successful

and quick closing of an acquisition could also be helpful in determining whether or not certain deals are even worth pursuing in the first place.

Many other papers have looked at other factors pertaining to cross-border deals like societal institutions (Dikova et al, 2010), country risk and to/from emerging market acquisitions (Zhou et al, 2016). However, many of these papers have been entirely or partly devoted to whether or not these deals even close at all.

In their 2010 paper on cross-border acquisition abandonment and completion Dikova et al explored the factors that could delay or derail international acquisitions in the international business service industry. They noted through their research that firms still abandon up to 25% of all announced acquisition attempts and this can sometimes lead to a costly outcome despite the fact that no purchase was completed. A notable example of these potential costs was displayed in the $1B breakup fee that Aetna had to pay to Humana after terminating their merger agreement in 2017 (Japsen, 2017). The authors attempted to determine several factors that could end up being deal-breakers in announced international M&A acquisitions. The authors also looked at how firms could benefit from organizational learning and noted how some corporate acquirers had turned acquiring companies into a science. The notable example was how GE Capital could effectively integrate most of its acquisitions within 100 days (Ashkenas et al, 1998). The literature examined by the authors suggested that this learning curve played a crucial role in determining the successful integration of an acquisition after deal closing and wanted to extrapolate whether or not learning from previous acquisitions brought any benefit to shortening the intermediary period between when deals were announced and when they closed. A shorter intermediary period could potentially reduce direct costs like devoting a team to communicating with the target company, regulators and other stakeholders. It could also reduce other indirect costs of missing out on other investment opportunities and acquisitions that could also be lucrative for example.

Dikova et al decided to focus on IB services as it typically involves areas like accounting, advertisement, and management services where “national formal and informal institutional factors to play a greater role than in industries where business transactions involve an exchange of mainly tangibles.” The authors found support that formal and informal institutional differences had a negative impact on the likelihood that a deal would close. However, the authors only found partial support for their hypotheses that formal and informal institutional differences between acquirer and target countries positively increased the amount of time it took for a deal to close. Similarly,

the authors found evidence that learning experience reduced the impact of formal and informal institutions on the likelihood of deal completion, but only found partial support for learning experience reducing the impact of formal and informal institutions on the amount of time it took for completed deals to close.

The previously examined paper focused exclusively on cross-border acquisitions between already developed economies. However, in acquisitions between emerging markets and developed economies the acquirer or target could be quite different in terms of their experience in dealing with the regulatory frameworks of the more developed economies or even in terms of their ownership structure. In their 2015 paper, Zhou et al looked at the likelihood of completion between acquisitions where the acquirer was from an emerging market vs. where the acquirer was from another a country and trying to make an acquisition in the emerging market. Their paper specifically looked at the 4 BRIC countries (Brazil, Russia, India, and China). In terms of deal completion likelihood, the results were massively different between the two papers. Zhou et al observed a failure rate of 32.5% vs. the 18% that was observed by Dikova et al in their paper.

In their paper Zhou et al set out to test whether distance in country law/regulation and distance in country risk were more or less negative for inbound than for outbound M&As for emerging market companies. Similar to the paper by Dikova et al, the authors tested whether or not firms benefited from past success and failure experience in both inbound outbound M&A from the aforementioned emerging markets. Finally, the authors also looked at whether the affects of the stake sought in the target and the form of payment had different affects on inbound and outbound M&A from emerging markets.

Zhou et al in their extensive research and testing found that in most cases the likelihood of completion for inbound M&A to emerging markets was higher than the likelihood that outbound M&A would succeed. This implies that emerging markets are perhaps plagued by a negative image of foreignness when pursuing acquisitions in developed economies. However, as the distance between country regulatory and legal frameworks increases past a certain point that relationship becomes inverted. Also, since in developed economies the financial, legal, and economic systems are relatively predictable it could be a lot easier for an emerging market company to prepare to pursue an M&A opportunity in a more developed economy. Learning also played a big role in the likelihood that a deal would close with prior successes often being a harbinger for continued success and prior failures leading to continued failure for both acquirers from emerging and

developed economies. However, this affect was magnified for failures of companies from emerging markets.

For M&A inbound to an emerging market if a deal structure was all cash and the percentage sought was higher these both benefited the likelihood of a deal closing as the emerging economies were perceived to be seeking greater capital investment. However, the opposite tended to be true for deals pursued by acquirers from the emerging markets as they would run into antitrust and national security concerns.

The ownership structure of some of the firms from these emerging markets could have also played a negative role in their likelihood of success. For example, if the acquiring firm is a State-Owned Enterprise (SOE) it may raise red flags in target countries as they may not want a foreign state to hold control over large parts of their economy. This would be especially true of the BRIC where the top ten companies represent up to 50% (Brazil), 81% (Russia), 59% (India), and 96% (China) of the weighted average of sales, assets and market vale in the top 10 firms of those economies (Büge et al, 2013). State-owned firms also tend to experience a lower likelihood of completing a cross-border deal and also take a longer time to complete successful deals than other foreign firms (Li et al, 2016).

The effect that bilateral trade has on deal completion likelihood and duration has also been looked at. It was found larger bilateral trade between countries both reduced the likelihood of an acquisition closing and also reduced the amount of time that that it took for acquisitions to be completed. However, neither of these results were statistically significant (Li et al, 2016). In the same paper the effect of being in the same industry was also explored and even though it not statistically significant for deal completion likelihood, it was shown to reduce deal completion times for foreign firms and that result was statistically significant.

The relationship between trade and foreign direct investment could also play a role in whether or not policy makers decide to intervene in cross-border acquisitions. It has been found that outward foreign direct investment is complementary to increasing exports from the nation of the acquirer (Liu and Graham, 1998). Seeing as outward foreign direct investment has been proven to increase exports the opposite could also be true that inward foreign direct investment is complementary to a host economy importing more, which could be disconcerting to a country that already has a large deficit with the trading partner in question. Inward acquisitions done through foreign direct investment do however also have some positive consequences for the host country.

There is a strong positive correlation between the share of employment in an industry held by foreign companies and increases in total factor productivity in those industries. However, the spillover effects of increased productivity usually take a longer time to spread to domestic firms (Haskel et al, 2002). The most notable example of this situation being the productivity gap between Japanese and American automakers, which seems to be closing in recent years (NBC, 2007).

The manner in which total factor productivity increases could also be of concern to lawmakers, manufacturing employment in America has declined by 5 million jobs since the turn of the century despite manufacturing output being at record highs (Nutting, 2016). Despite this fact politicians routinely blame trade with countries with cheaper labour for reducing manufacturing employment in America and weakening the middle class (Long, 2016). Clearly foreign direct investment has a large effect on both the originating and receiving economies, however policymakers typically frame economic competition through the lens of trade. Tariffs are just one of the levers that they have at their disposal to affect outcomes, however they can also take more time to review capital inflows or prevent them outright if they think it will hurt the American economy/people or be detrimental to national security. Trade and foreign investment relations with Japan are what ultimately led to the expanded powers given to the Committee on Foreign Investment in the United States (CFIUS) in 1988 (Jackson, 2017).

Hypotheses

Closing Time

One might expect that the closing time between domestic acquisitions and international acquisitions is statistically different, however, there are several factors could be to the benefit of either a foreign or domestic buyer. For example, if a foreign buyer is trying to just get a toe hold in America and it's a new market for them they may be less likely to run the ire of America's competition and antitrust regulators as opposed to a domestic buyer which might already have a share of the market and is trying to buy up the competition. A domestic buyer on the other hand would likely have greater knowledge of the processes required to close an acquisition in America and how to deal with the formal institutions and informal cultural nuances that could impede or slow down a takeover deal.

Several factors could both be detrimental and beneficial to foreign acquisitions and domestic acquisitions, therefore it is expected that there would be no statistical difference between the closing times of domestic and foreign acquisitions.

Deal Related Factors

A larger deal size is likely to be more complex and as a result take longer, regardless of whether the acquiring company is from a foreign country or if it's American. The paper will also explore whether or not deals between companies within the same macro industry (as defined by Thomson Reuters) take longer to complete. Anti-trust laws in America are supposed to be geared to protect and promote competition within industries (Markham, 2006). Therefore, it could be assumed that trying to buy the competition (industry consolidation) would result in a greater likelihood of anti-trust action being pursued. As fighting an anti-trust proceeding takes time, one could assume the amount of time it would take for a deal to close would increase regardless of whether it is a cross border transaction or not. However, in prior literature, when same industry was used as a control variable, whether or not the companies operate in the same industry in foreign acquisitions was found to shorten acquisition times (Li et al, 2016).

Therefore, it is expected that deal size and the number of days it takes to complete a deal will be positively correlated with deal completion times. It is also expected that if both the acquiring and target company operate in the same industry the deal will take longer to complete for domestic firms and shorter to complete for foreign firms.

Trade

If America's trade deficit is large with another country it should in turn receive a large amount of foreign direct investment (in the long run) from that country as companies that receive payment in American dollars will seek to invest those American dollars. This could in turn create an experience curve in countries that are running large deficits with America. This would result in companies from those countries learning what works and what doesn't when pursuing the acquisition of a public company in America, thus reducing the amount of time that it would take to acquire an American company.

Conversely if a lot of foreign direct investment is coming from one trading partner in particular this could lead to fears that companies from one foreign power could hold too much sway over large swathes of the American economy. This in turn could cause regulators to give acquisitions from America's largest trading partners greater scrutiny, resulting in a lengthier time required to acquire an American company. In terms of bilateral trade there is little evidence to support this assumption in prior literature (Li et al, 2016), however negative sentiment connected to large trade deficits could create longer deal completion times.

America's large trade deficit could also be reducing its' competitiveness resulting in more jobs being shipped overseas. If a foreign buyer from a country that America holds a large trade deficit with is acquiring intellectual property, a brand, or expertise manufacturing and sourcing of the actual product would still be at an even greater risk of moving offshore. By importing more goods American companies can lose expertise and abandon factories, lowering the overall standard of living for its citizens (Amadeo, 2017).

Therefore, it is expected that companies from countries that hold large trade deficits with America will take longer to close acquisitions in America.

Foreign Policy Considerations

Foreign policy considerations could be a double-edged sword for many foreign companies. In many ways it could make sense to put extra scrutiny on a company from a non-allied country trying to acquire assets in America. Concerns over whether or not a foreign power may gain some leverage over strategic resources or technologies or try to use its position in the American market to influence the public policy debate in the future could make authorities think twice before letting a deal proceed.

Alternatively, greater economic ties between non-allies and America could result in a continuation of peaceful relationships between America and countries with a lot of foreign direct investment in America. This would argue in favour of removing hurdles that could impact greater globalization regardless of whether or not acquiring companies are from allied or non-allied nations. Economic ties certainly do play a part in the pursuit of peace as was evidenced by the Former President Bill Clinton, whom when signing NAFTA said, "I believe we have made a decision now that will permit us to create an economic order in the world that will promote more

growth, more equality, better preservation of the environment, and a greater possibility of world peace" (Miller Center, 2017).

For companies from countries that are allied with America several factors could impact their incursions into the American economy that could both make acquiring companies there harder or easier. Many of America's alliances have been long standing and companies from their allies have had access to the American market for much longer than companies from Cold War adversaries. This means that these companies could potentially face a greater likelihood of antitrust actions as they may already have a large portion of the American market in some industries. Alternatively, these companies would not face as much distrust when attempting to acquire companies in certain industries related to the energy, telecommunications, and military infrastructure of America.

Recent anecdotal evidence would tend to suggest that international acquisitions may take longer due to national security concerns. Currently, CFIUS is holding up at least 55 transactions started in 2016. Of these transactions, 28 are from companies headquartered in G7 countries and 27 are being attempted by Chinese buyers (Donnan, 2017). This is extending that amount of time that it might take for these deals to close or affecting the likelihood that they will even close to begin with. If these deals that are reviewed by CFIUS typically do not close they would not have as much of an impact on overall deal closing times.

Given that economic cooperation is viewed as a force for peace, it is expected that whether or not a foreign acquisition is from an allied or non-allied country will have no bearing on the length of time it takes a deal to close.

Data

M&A data

Data was collected from several different sources. All transactional data was collected from the Thomson Reuters Eikon database, consistent with the data used in other papers (Dikova et al, 2010 & Zhou et al, 2016). The database derives its information from several different sources including international and US media, filings with both domestic and foreign regulators, and trade publications. This includes deal values, industries of both the acquirer and target companies,

announcement and completion dates for the acquisition, and the country of the acquirer in the case of foreign buyers. Announcement and deal completion dates were then used to calculate the amount of time that it took for a deal to close. This data pull provided transaction data for 466 completed foreign acquisitions and 2,972 acquisitions that were completed by domestic American companies during the years 2000-2015. Interesting to note here, is that of the foreign acquisitions only 19 were from the BRIC countries which could be due to the evidence presented by Zhou et al that acquisitions from emerging markets to a developed economy (in this case America) are more likely to fail than acquisitions going the other way. Anecdotally, their hypotheses of the negative affect foreignness could also be detrimental to the closing time of an acquisition, with Chinese acquisitions of American companies taking longer on average than any other country's acquisition (see Appendix 1 for a breakdown of statistics by country). On average foreign acquisitions from the sample required approximately 127 days to complete and domestic acquisitions required approximately 133 days to complete which is notably higher than the findings of Dikova et al. The medians observed in the data set collected for this paper were also higher than those observed in previous papers with the median for foreign acquisitions being 102 days and the median for domestic acquisitions being 112 days compared to medians observed by previous literature of 62 (Muehlfeld et al, 2012). However, several factors could be contributing to this difference such as the fact that their paper focused on transactions made between companies from 2 developed economies and also focused on transactions in only one industry IB services. There is no direct comparison to the data collected for this paper and that used in the Dikova et al paper as that paper relied on SIC industry breakups while this paper relies on the industry divisions determined by Thomson Reuters, however please refer to Appendix 2 for breakdowns of averages by industry.

Different from the previously mentioned papers, the only deals pulled from the database were those with a value greater than $50 million, where the percentage sought in company being acquired was 100%, and the company was a publicly-listed. This is in contrast to many of the previously mentioned papers that used public company status and percentage sought as control variables. These parameters were chosen as public companies would be more likely to have a more widely publicized intermediary phase (the period between deal announcement and completion) than those of acquisitions of a private companies and acquisitions of entire companies would be more likely to attract regulatory scrutiny than acquisitions of smaller ownership stakes. Also unlike

the papers by Muehlfeld et al and Dikova et al which focus on specific industries (the global newspaper industry and the IB services industry respectively) this data set was intended to focus on a specific target company country instead (America). This in addition to the fact that the range of years used for this paper included 2 recessions (the Dot-com Bubble and the 2008 Financial Crisis) could be the reason that the averages and medians observed in this paper's dataset are above those observed in the previous literature's data sets.

Trade Data

All trade related data for the years 2000-2015 was collected from the US Census Bureau, which came in the form of total exports by month and year for America and a break down of those totals with every country that America trades with. This in turn was then used to calculate the total balance of trade for each of America's trading partners for each year and which was then used to create a matrix that organised trade balances by country and year. For the purposes of the regression analysis for each international deal, a matrix lookup was performed to determine what percentage of the American trade deficit the acquirer's country was responsible for in the year the acquisition was announced.

Foreign Policy Dummy Variable

Lastly, data for the foreign policy dummy variable was collected. This included collecting a list of countries that are part of the NATO alliance (from the NATO website) and those countries that have been designated by America as Major Non-NATO Allies (MNNA), which was found on the Cornell Legal Information Institute website. The hypotheses put forward by Zhou et al that companies from emerging economies trying to acquire large stakes in companies in developed economies tended to run into national security concerns lends support to looking into the foreign policy implications of M&A. Especially as all of the origin countries (the BRIC nations) studied in that previously reviewed paper are not considered to be allies in American foreign policy. However, the fact that these companies are less likely to succeed in their merger attempts could lead to a bias in that the only successful acquisitions left in the sample would be those that would be likely to close the fastest.

Variable Definitions

All of these data points were then used to create several regressions with an example regression appearing as such:

$$Days\ to\ Complete\ Transaction = \beta_0 + \beta_1 Deal\ Size + \beta_2 Same\ Industry + \beta_3 Trade + \beta_4 Ally$$

Deal Size: The overall size of the transaction being completed (in millions of dollars).

Same Industry: Dummy variable if the acquirer and target operate in the same industry.

Trade: Variable based off the percentage of America's total deficit that the acquirer's country is responsible for in the year of the acquisition. For example, for a Japanese company pursuing an acquisition in 2012 this value would be 10.47%. This is because America's total trade deficit in 2012 was $730.4 billion, while its trade deficit with Japan that year was $76.5 billion.

Ally: Dummy variable if the acquirer's nation is an American ally either through being in NATO or being designated a Major Non-NATO Ally.

Analysis

Firstly, is there a statistically significant difference in the average amount of time that it takes for an international deal to close compared to a domestic one. To determine this a z-score was calculated to determine a probability for the overall and industry averages. The formula for the test statistic comparing to means was (Rumsey, 2017):

$$z = \frac{(\bar{x}_1 - \bar{x}_2) - 0}{\sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}}}$$

Note that the subscript 1 denotes the values for foreign acquisitions and subscript 2 denotes the values for domestic acquisitions. Using the calculated averages and standard deviations from Appendix 2 resulted in the test statistics and p-values seen in **Table 1**. Even given a relatively conservative level of $p < 0.05$ the only industry where acquisition length is statistically different is in Financials and the length of time it takes to complete a deal is actually shorter in that industry

for an international company. As previously noted the sample includes the time period of the financial crisis and this could have been helpful to foreign financial institutions trying to enter the American market. Regulators were struggling to shore up bad banks in the economy and foreign financial institutions would have maybe had more capital than their American counterparts (which owned a lot of subprime debt) to provide capital to other struggling financial institutions. In the overall economy the results are in line with the proposed hypothesis that deals will take approximately the same amount of time to close regardless of whether the acquirer is foreign or domestic.

Table 1.

Target Industry	z	p-value
Consumer Products and Services	0.25	0.3869
Consumer Staples	0.06	0.3983
Energy and Power	0.39	0.3699
Financials	-2.92	0.0056
Healthcare	-0.95	0.2539
High Technology	1.56	0.1189
Industrials	0.77	0.2959
Materials	0.49	0.3539
Media and Entertainment	0.09	0.3972
Real Estate	-1.54	0.1212
Retail	-0.86	0.2745
Telecommunications	0.19	0.3918
Overall	-1.18	0.1997

To test the remaining hypotheses several regressions were ran, table 2 provides a brief summary of the results of all the different models that were tested (full regression results are available in appendices 3-6).

Table 2.

	Model 1 Domestic	Model 2 Foreign	Model 3 Foreign	Model 4 Foreign	Model 5 Foreign
Intercept	114.8756315	112.2586368	106.2449654	100.4912098	93.91637673
	3.0124E-285	*3.8135E-35*	*1.26543E-30*	*1.31617E-16*	*1.86511E-14*
Deal Value	0.002726853	0.005181422	0.005296487	0.005167277	0.00528318
	1.22116E-27	*2.63177E-07*	*1.23869E-07*	*2.7523E-07*	*1.28229E-07*
Same Industry	17.79884026	3.332616932	2.391021948	2.539217572	1.553155351
	1.88037E-07	*0.733425571*	*0.805832602*	*0.795345029*	*0.873175809*
Trade			185.0315354		187.3203303
			0.007832241		*0.007043033*
Ally				15.68662384	16.33552028
				0.1527526	*0.133963569*
Adjusted R-Squared	0.047684601	0.052757587	0.065142127	0.054903546	0.067672509
**p-values are in italics*					

The Dependent variable as seen in the sample formula in the Data section is the number of days it took to complete a successful transaction. In the base model only two independent variables are used and those are the deal size and whether or not the Acquirer and Target company are in the same industry. Neither model explained a large portion of the variation in deal completion times for both foreign and domestic acquisitions. The R^2 for the domestic model was 0.0477 compared to an R^2 of 0.0528 for the foreign acquisition model, meaning that these two variables of "Deal Value" and "Same Industry" explain very little of the variation in deal completion times for these acquisitions. Given a 95% confidence interval both variables were in line with the hypotheses set out for domestic acquisitions, in that a larger deal size and whether or not companies operated in the same industry both increased deal completion times for domestic firms. The affects these variables had were also shown to be statistically significant with p-values for both "Deal Value" and "Same Industry" being less than .05. However, with 95% confidence it could not be accepted that the "Same Industry" variable was below 0 for acquisitions by international buyers as the p-value is well above .05, which differs from results noted in prior research (Li et al, 2016). Surprisingly, the "Same Industry" beta was positive for the foreign acquisition sample collected

and this could be due to the fact that the sample collected was from a later period in time than that used by Li et al (1990-2012) and more foreign firms as a result could already have a greater exposure to American markets in this time period and thus be more prone to anti-trust involvement in proposed acquisitions. Overall, deal value had a greater impact on the closing time of foreign acquisitions than it did for domestic acquisitions and the opposite was true for company pairs in the same industry.

The next hypothesis that was tested was whether or not perceptions of economic competitiveness between the acquirer country and the target country could play a part in extending the length of time that it took for an acquisition to close. This was examined through the lens of trade deficits. As can be seen from Model 3 for every 1% increase of America's total trade deficit coming from the acquirer's country in the year of the announcement the deal would take 1.85 days longer to close. This beta is also statistically significant given 95% confidence which provides evidence in support of the view that perceptions of economic competition plays a part in lawmaker and regulator decisions to more thoroughly review foreign acquisitions. This implies strong evidence that perceptions on trading relations with other countries could slow down closing times for companies that come from countries that America holds large deficits with in line with the proposed hypothesis.

Whether or not the acquiring company is from an allied or non-allied country seems to have no statistically significant bearing on the amount of time that it takes to close a deal in line with the theory proposed in the hypothesis. From the results seen in Model 4 it actually seems to evidence that deals being pursued by companies from Allied countries actually seem to take longer. This weak positive number could be due to a difference in review outcomes when regulatory bodies like CFIUS get involved in international acquisitions. If companies from allied countries are more likely to pass CFIUS review they still need to cope with the waiting time that the review entails and that would add more time to the deal closing process for them and thus impact the results of any regression. If companies from non-allied countries are more likely to face CFIUS rejections that would not impact the outcomes of the regressions that were ran.

When it comes to deal completion times for foreign firms, the affects of the above variables had never been tested before. The above models show that the deal value and trade are statistically significant in affecting the completion times of deals. However, their impact alone does not explain much of the variation in deal completion times. The ways in which they affect deal completion

times are unlikely to be correlated with previously tested values in the Dikova et al paper, which included distances in legal/regulatory frameworks and the past learning experience of acquirers. Negative perceptions of deficits were shown to have a statistically significant impact on deal completion times unlike the affect seen by bilateral trade in previous research (Li et al, 2016). The results are also quite different from past results as deals in all industries were looked at, whereas most prior papers had looked at deals within specific industries. Differences in deal complexity between industries that have either more tangible or intangible assets could also play a role in deal completion times and increase the overall variation and standard deviation compared to deals in just one industry.

Conclusions

The above results show that even though there is no statistically significant difference in deal completion times between foreign and domestic firms acquiring companies in America different factors affect the length of time these deals need to complete. The size of the deal seems to have more of an impact on deal completion times for foreign firms. Foreign firms also seem to get less scrutiny when acquiring companies in the same industry than their domestic counterparts. This may be due to the fact that these deals aren't seen to impact the competitive landscape within industries.

Perceptions of economic competitiveness might also give regulators some pause before allowing a deal originating from a country that America already has a large trade deficit with. Although there is evidence that foreign direct investment has some benefits of increasing total factor productivity there are also costs. The literature suggests domestic firms are the last firms to benefit from productivity increases and that acquirer countries often benefit through outward foreign direct investment by exporting even more. This could in turn give lawmakers and regulators more reasons to hold up deals or disallow them outright.

The results also show that whether or not the country of the acquirer is an ally of America has no statistically significant bearing on deal closing times. However, this could also be due to regulators rejecting these deals before they can even be completed.

Appendix 1: Statistics on Days to Completion by Country

Days to Completion by Country			
Country	**Sample Size**	**Average**	**σ**
Argentina	3	105.67	18.82
Australia	14	170.64	147.30
Austria	2	91.50	9.19
Bahamas	1	52.00	0.00
Belgium	4	159.25	51.56
Bermuda	14	115.00	68.91
Brazil	3	149.67	5.51
British Virgin Islands	1	37.00	0.00
Canada	95	133.36	127.23
Cayman Islands	1	112.00	0.00
China	6	215.17	158.66
Cyprus	1	103.00	0.00
Denmark	5	81.20	24.83
Finland	6	131.00	89.16
France	32	124.31	77.64
Germany	30	161.77	115.48
Hong Kong	3	189.67	147.36
India	4	54.00	22.76
Israel	12	115.17	53.95
Italy	11	154.64	99.44
Japan	29	114.41	75.27
Mexico	4	73.75	41.44
Netherlands	33	105.18	76.04
New Zealand	2	88.50	3.54
Norway	1	85.00	0.00
Poland	1	79.00	0.00
Republic of Ireland	8	84.50	90.11
Russian Federation	6	117.33	88.67
Singapore	4	138.75	43.35
South Africa	3	107.00	63.02
South Korea	2	80.00	33.94
Spain	14	196.00	117.03
Sweden	14	73.43	38.97
Switzerland	18	125.72	80.97
Taiwan	1	50.00	0.00
United Kingdom	78	120.68	92.29
Grand Total	466	126.78	99.31

Appendix 2: Statistics on Days to Completion by Industry

Domestic Acquisition Days to Completion			
Target Industry	**Sample Size**	**Average**	**σ**
Consumer Products and Services	187	101.39	60.81
Consumer Staples	93	122.60	81.05
Energy and Power	213	174.69	115.17
Financials	675	169.25	86.98
Healthcare	349	109.33	71.37
High Technology	599	98.17	60.79
Industrials	209	115.33	78.10
Materials	110	128.71	85.08
Media and Entertainment	133	178.68	139.06
Real Estate	135	124.02	56.62
Retail	141	117.94	84.61
Telecommunications	128	153.77	108.73
Overall	2972	132.52	89.03

International Acquisition Days to Completion			
Target Industry	**Sample Size**	**Average**	**σ**
Consumer Products and Services	27	104.70	65.81
Consumer Staples	27	123.56	77.01
Energy and Power	36	185.78	164.39
Financials	55	144.98	56.34
Healthcare	98	101.00	78.04
High Technology	88	112.17	81.15
Industrials	31	126.77	76.76
Materials	55	139.27	148.25
Media and Entertainment	14	181.79	115.55
Real Estate	10	105.40	34.90
Retail	12	101.75	59.99
Telecommunications	13	159.62	105.17
Overall	466	126.78	99.31

Appendix 3: Base Regression Model for Domestic and International Transactions

Domestic acquisitions:

Regression Statistics	
Multiple R	0.219831014
R Square	0.048325675
Adjusted R Square	0.047684601
Standard Error	86.87880481
Observations	2972

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2	1137961.175	568980.5873	75.38236764	0
Residual	2969	22409794.45	7547.926725		
Total	2971	23547755.62			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	114.8756315	2.840510146	40.44190149	3.0124E-285	109.3060634	120.4451996
Deal Value	0.002726853	0.000247772	11.00548189	1.22116E-27	0.002241031	0.003212676
Same Industry	17.79884026	3.407670543	5.223169328	1.88037E-07	11.11720486	24.48047566

International acquisitions:

Regression Statistics	
Multiple R	0.238394102
R Square	0.056831748
Adjusted R Square	0.052757587
Standard Error	96.65437265
Observations	466

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2	260630.8642	130315.4321	13.94931353	1.31037E-06
Residual	463	4325377.37	9342.067753		
Total	465	4586008.234			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	112.2586368	8.331548319	13.47392255	3.8135E-35	95.88630391	128.6309697
Deal Value	0.005181422	0.000991562	5.225517308	2.63177E-07	0.003232903	0.00712994
Same Industry	3.332616932	9.779447635	0.340777624	0.733425571	-15.88498415	22.55021802

Appendix 4: Model with Trade

Regression Statistics	
Multiple R	0.266783561
R Square	0.071173469
Adjusted R Square	0.065142127
Standard Error	96.02044922
Observations	466

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	3	326402.1127	108800.7042	11.80060408	1.84399E-07
Residual	462	4259606.121	9219.926669		
Total	465	4586008.234			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	106.2449654	8.577686987	12.38620219	1.26543E-30	89.38884956	123.1010812
Deal Value	0.005296487	0.000986	5.371691216	1.23869E-07	0.003358886	0.007234087
Same Industry	2.391021948	9.721701795	0.245946852	0.805832602	-16.71321111	21.495255
Trade	185.0315354	69.27737813	2.670879591	0.007832241	48.89372688	321.1693439

Appendix 5: Model with Foreign Policy Factors

Regression Statistics	
Multiple R	0.246983689
R Square	0.061000943
Adjusted R Square	0.054903546
Standard Error	96.54482629
Observations	466

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	3	279750.8248	93250.27494	10.00442448	2.12342E-06
Residual	462	4306257.409	9320.903483		
Total	465	4586008.234			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	100.4912098	11.6945348	8.593006185	1.31617E-16	77.51013894	123.4722807
Deal Value	0.005167277	0.000990487	5.216905714	2.7523E-07	0.003220859	0.007113695
Same Industry	2.539217572	9.784058522	0.259526	0.795345029	-16.68755344	21.76598858
Ally	15.68662384	10.95254362	1.432235687	0.1527526	-5.836351281	37.20959897

Appendix 6: All Factor Model

Regression Statistics	
Multiple R	0.275122755
R Square	0.075692531
Adjusted R Square	0.067672509
Standard Error	95.8904118
Observations	466

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	347126.5682	86781.64206	9.437946172	2.4357E-07
Residual	461	4238881.666	9194.971075		
Total	465	4586008.234			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	93.91637673	11.86650324	7.914410405	1.86511E-14	70.59723571	117.2355177
Deal Value	0.00528318	0.000984704	5.365244478	1.28229E-07	0.003348114	0.007218245
Same Industry	1.553155351	9.724563842	0.159714654	0.873175809	-17.55681082	20.66312153
Ally	16.33552028	10.88094437	1.501296185	0.133963569	-5.04687613	37.71791668
Trade	187.3203303	69.20035359	2.706927358	0.007043033	51.33310893	323.3075517

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